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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 08/27/2008

Johnson & Johnson International Patent Law Division Attention Philip Johnson P.O. Box 1222 New Brunswick, NJ 08903 EXAMINER
YANG, NELSON C
ART UNIT PAPER NUMBER

1641 DATE MAILED: 08/27/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/832,663	04/11/2001	Anthony J. Polak	LFS5044USNP	1850	
TITLE OF INVENTION: SENSOR DEVICE AND METHODS FOR MANUFACTURE					

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/28/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further indicated unless correcte maintenance fee notificat	correspondence including a below or directed oth	or transmitting the 1880 ig the Patent, advance of herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wi pondence address;	ll be mailed to the curren and/or (b) indicating a sep	snould be completed where t correspondence address a arate "FEE ADDRESS" fo	
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Attention Philip	ent Law Division	/2008	I be	Certi	ficate of Mailing or Tran		
P.O. Box 1222 New Brunswick,	NJ 08903					(Depositor's name)	
						(Signature)	
						(Date)	
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nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/28/2008	
EXAM	INER	ART UNIT	CLASS-SUBCLASS	1			
YANG, NI	ELSON C	1641	435-007920	•			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ess an assignee is identi h in 37 CFR 3.11. Comp	" Indication form ed. Use of a Customer A TO BE PRINTED ON	(1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or typ data will appear on the p TT a substitute for filing an (B) RESIDENCE: (CITY	rely, e firm (having as a regent) and the names regent) and the names rneys or agents. If no printed. be) atent. If an assigned assignment.	nember a 2	document has been filed for	
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🗖 Cor	poration or other private gr	oup entity 🚨 Government	
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	s SMALL ENTITY statu	is. See 37 CFR 1.27.			. ENTITY status. See 37 C		
interest as shown by the r	records of the United Sta	tes Patent and Trademark	Office.	ne appricant, a regisi	ered attorney or agent, or t	he assignee or other party ir	
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Attention Philip Johnson			1641	
P.O. Box 1222			DATE MAILED: 08/27/200	8

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 524 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 524 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
09/832,663	POLAK ET AL.
Examiner	Art Unit
Nelson Vana	1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- This communication is responsive to the response filed March 17, 2008.
- The allowed claim(s) is/are 1-15,19,20,23-26,28-32,34-44,46 and 47, renumber 1-39 respectively.
- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) \square All b) ☐ Some* c) ☐ None of the:
 - 1.

 Certified copies of the priority documents have been received.
 - 2.

 Certified copies of the priority documents have been received in Application No. ____
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received:

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) I including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of

each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

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Art Unit: 1641

EXAMINER'S AMENDMENT An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Mayumi Maeda on August 6, 2008, and August 11, 2008.

Please cancel claims 16 and 17 and amend claims 1, 5, 11, 12, and 44 as follows:

- 1. A device for detecting the presence of an analyte in a sample, comprising:
 - (a) a core comprising:
 - (i) a binding substrate comprising a binding site within a porous material, wherein
 the binding site comprises a molecular imprint of the analyte, with a binding site
 for the analyte.
 - (ii) at least one analogue that binds in the binding site and that has a label with a first emission wavelength:
 - (iii) a quenching dye <u>located within the porous material of the binding substrate</u>; and
 - (iv) a void volume that is at least partially defined by the binding substrate;
 - (b) a reference with a different emission wavelength than the label; and
 - (c) an analyte-permeable membrane that completely encapsulates components (a) and (b) and that is transparent to light of the wavelengths that excite the label and the reference, wherein the device is seamless and the binding substrate has a molecular imprint of the analyte. and
 - wherein the analogue is capable of flowing in and out of the porous material into the void volume, while the quenching dye is not capable of leaving the porous material.
- 5. The device of claim 1, wherein said reference is covalently bonded to at least one of the interior or exterior of the analyte-permeable membrane
- 11. The device of claim 1, wherein said binding substrate <u>further comprises a material</u> is selected from the group consisting of dextrans, glycogens, yeast mannans, amylopectins, levans, globulin, proteins, hormones, antibodies, thyroxin binding globulin, actin, and tubulin.
- 12. The device of claim 1, wherein the binding substrate comprises is crosslinked dextran.

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Art Unit: 1641

44. A method of detecting the presence of one or more analytes in a sample in vivo, comprising:
(#) I. implanting in the skin of a living organism, in fluid contact with a biological fluid, a device comprising at least one device for detecting the presence of an analyte in a sample, the device comprising:

(a) a core comprising

- (i) a binding substrate <u>comprising a binding site within a porous material</u>, wherein the binding <u>site comprises a molecular imprint of the analyte</u>, with a binding site for the analyte.
- (ii) at least one analogue that binds in the binding site and that has a label with a first emission wavelength;
- (iii) a quenching dye <u>located within the porous material of the binding</u> substrate: and
- (iv) a void volume that is at least partially defined by the binding substrate:
- (b) a reference with a different emission wavelength than the label; and
- (c) an analyte-permeable membrane that completely encapsulates components (a) and (b) and that is transparent to light of the wavelengths that excite the label and the reference,
- wherein the device is seamless-and the binding substrate has a molecular imprint of the analyte. and
- wherein the analogue is capable of flowing in and out of the porous material into the void volume, while the quenching dye is not capable of leaving the porous material:

(ii) II. irradiating the device with light; and

(iii) III. detecting light emitted from the device.

wherein the device is implanted in the skin of the living organism.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the prior art fail to teach a porous material with a labeled analogue and quenching dye, wherein the labeled Application/Control Number: 09/832,663

Art Unit: 1641

analogue is capable of flowing in and out of the porous material into the void volume, while the quenching dye must remain within the porous material.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (571)272-0826. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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